DELTA-THERM CORPORATION®

DATA SHEET

SNOW SWITCH MODEL GF PRO

AUTOMATIC SNOW AND ICE MELTING SYSTEM CONTROL

FEATURES & BENEFITS

- Automatic snow and ice melting control minimizes operating costs
- Supply Voltage 100 – 277 VAC
  Rated for up to 30 amp resistive loads
- Integral 30mA of Ground Fault Equipment Protection (GFEP)
- Weather-resistant NEMA 4X enclosure
- UL Listed for Temperature Regulating Equipment
- Adjustable Hold-On timer continues heater operation after snow and ice stop to ensure complete melting
- Dual sensor capability to meet site performance requirements
- Automatic and manual-override operator controls for changing environmental conditions
- Optional remote control operation for added convenience

DESCRIPTION

The Snow Switch Model GF Pro is an automatic snow and ice melting control system. Utilizing standard Environmental Technology snow and ice sensors (sold separately), applications include snow and ice detection and melting for pavement, sidewalks, loading docks, roofs, gutters and downspouts in commercial and residential environments.

The GF Pro interfaces with up to two standard Environmental Technology sensors to meet site requirements. Roof or mast mounted, CIT–1 Aerial Snow Sensor can be paired with the GIT–1 Gutter Ice Sensor (gutter deicing applications) or the SIT–6E Pavement-Mounted Snow and Ice Sensor (trafficked surface applications). All three sensors detect precipitation as snow at snow and ice melting. Since 1968, these sensors have been the industry's most versatile and cost-effective automatic snow melting control sensors.

The GF Pro features built-in 30mA, self-testing Ground Fault Equipment Protection (GFEP), digitally filtered to minimize false tripping. A ground fault condition must be manually reset using the Test/Reset switch before heater operation can continue.

The GF Pro uses both automatic and manual-override operator controls. The adjustable Hold-On timer can continue heater operations up to 8 hours after snow or ice conditions end to ensure complete melting and a dry surface. The Heater Cycle control button allows manual initiation or cancelation of a heating cycle. Use the optional RCU–4 remote control unit for convenient monitoring and operation. These flexible control options provide complete snow melting and water evaporation for lower operating costs.

The GF Pro weighs only 3 pounds and measures 5 1/2" (L) x 8 1/8" (W) x 4 3/8" (H). Comprehensive instruction manuals simplify installation and operation. GF Pro controllers are backed by Environmental Technology's Technical Support.

The GF Pro is a capable snow and ice control for medium-sized applications whose features and power requirements do not require an APS or EUR Series control panel. For complete information describing application, installation, and features, please contact Environmental Technology Customer Service or visit our website at networketi.com.

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SPECIFICATIONS

GENERAL

Area of use	Non-hazardous locations
Approvals	c UL us LISTED 109R **Type 873** Temperature Regulating Equipment Also evaluated by Underwriters Laboratories Inc® in accordance with UL 1053 Ground-Fault Sensing and Relaying Equipment

ENCLOSURE

Protection	IP 66, NEMA 4X
Cover attachment	Polycarbonate with machine screws
Entries	2 x 3/4" entry (bottom right) for NEC Class 2 connections 3 x 1-1/16" entries (bottom left) for supply and load power
Material	Polycarbonate
Mounting	Wall mount
Dimensions	5 1/2" (L) x 8 1/8" (W) x 4 3/8" (H) 140mm (L) x 207mm (W) x 112mm (H)

CONTROL

Supply voltage	100 –277 VAC; 50/60 Hz
Load	30 amp maximum resistive 30 amp maximum resistive
Contact type	2 Form A
Weight	3 Pounds (not including sensors)
Maximum Ratings	Voltage: 277 VAC Current: 30 amps
Heater hold-on timer	0 to 8 hours; actuated by snow stopping or toggle switch
System test	Switch toggles heater contact on and off. If temperature exceeds optional high limit thermistor (45°F), heater shuts off to reduce costs and prevent damage.

FRONT PANEL INTERFACE

Status indicator	SUPPLY (green): Power on HEAT (yellow): Heating cycle in progress SNOW (yellow): Sensor(s) detect snow GFEP (red): Ground Fault condition GFEP (red, flashing): Failed GFEP (red, rapid flashing): GFEP test in progress

SNOW / ICE SENSORS

Maximum quantity	2 ETI sensors
Circuit type	NEC Class 2
Lead length	Up to 500' (152m) using 18 AWG 3-wire jacketed cable Up to 2,000' (609m) using 12 AWG 3-wire jacketed cable

WIRE & CABLE RATINGS

Power cable	Size for heater load (30 amps maximum)
Sensor wiring	#18 AWG jacketed, 3-conductor
Heater cable	Size for maximum heater load
Remote wiring	#22 AWG jacketed, 2-conductor

GROUND FAULT EQUIPMENT PROTECTION (GFEP)

Set point	30mA
Automatic self-test	GFEP verified before contactors operate; GFEP runs on start-up and every 24 hours
Manual Test/Reset	Test/Reset switch on front panel

ENVIRONMENTAL

Operating temperature	-31°F to 113°F (–35°C to 45°C)
Storage temperature	-67°F to 167°F (–55°C to 75°C)

ORDERING INFORMATION

ORDER NUMBER	DESCRIPTION
23917	GF Pro
23918	GF Pro Installation and Operations Manual

ACCESSORIES

21358	RCU–4 Remote Control (Optional)

SNOW/ICE SENSORS (NOT INCLUDED)

10001	CIT–1 Aerial Snow Sensor
11351	GIT–1 Gutter Ice Sensor
24219	SIT–6E Pavement Mounted Snow and Ice Sensor

LIMITED WARRANTY

ETI's two year limited warranty covering defects in workmanship and materials applies. Contact Customer Service for complete warranty information.

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DIMENSIONAL DRAWINGS